

Communications cable contacts LV electric line

Vegetation Management Work

Safety alert

Background

Vegetation management workers employed by a vegetation management contracting company were pruning a nature strip tree on behalf of a municipal council as a part of the Council's electric line clearance program. The work was being performed from an Elevated Work Platform (EWP) and a Safety Observer was being used for this work.

One of the vegetation management workers was working aloft pruning vegetation from an EWP. The other vegetation management worker was acting as a Safety Observer. At the work site a communications cable was strung between the poles approximately 1.4 meters below the Low Voltage (LV) electric line.

The EWP Operator had slewed across below the communications cable and then raised the EWP's boom, making hard contact with the communications cable. The operator again raised the boom, lifting the communications cable into the LV conductor causing an arc.

The Safety Observer called to the EWP Operator to cease work in the moments prior to contact; however, they could not be heard due to traffic noise and the use of face masks (COVID protocol). The contact caused a power disruption in the area.

The incident created an unsafe electrical situation that had the potential to cause property damage, serious personal injury or in the worst circumstance an electrocution. Fortunately, no one was injured.

The incident was reported to the municipal council and to Energy Safe Victoria (ESV) by the contractor.

Investigation Findings

ESV conducted an investigation of this incident and found:

- The EWP Operator failed to maintain Safe Approach Distances (SAD) as required by the Electricity Safety (General) Regulations 2019 (regulations), constituting a breach of Electricity Safety legislation.
- The Safety Observer failed in their obligations as required by the ESV Electrical Safety Rules for Vegetation Management Work near Overhead Powerlines by Non-Electrical Workers.
- The risk assessment completed by the work crew before starting the work did not acknowledge the hazards caused by the communications cable with regard to accessing the vegetation to be pruned.
- The risk assessment did not acknowledge the hazards caused by the need to wear masks to comply with the companies COVID safe protocols; this created difficulties in establishing a clear method of communication between the EWP Operator and the Safety Observer.

ESV's view is that the combination of these failures means the crew members did not comply with the regulations, constituting a breach of Electricity Safety legislation; heavy penalties may be applied to such breaches.

Key Lessons

- Ensure all site hazards are identified and actions to control the hazards are implemented.
- Always maintain appropriate SAD when undertaking works in the vicinity of live electrical apparatus.
- Ensure the Safety Observer maintains effective and immediate communication with the work team at all times.
- Regularly reassess each worksite for hazards when completing electric line clearance work.

Important information

- Failing to identify hazards at the work site will place workers and possibly the community at risk of serious personal injury or in the worst circumstance, electrocution
- Ensure each individual work site is assessed for hazards and controls are implemented to manage risks
- When a qualified vegetation management worker is completing vegetation management works on behalf of a municipal council they must comply with the ESV Electrical Safety Rules for vegetation management work near overhead powerlines by non-electrical workers.
- Working near live high and low voltage electric lines is equally dangerous. A vegetation management worker was electrocuted in February 2019 when they made contact with uninsulated low voltage electric lines.

Enforcement outcomes

Having completed its investigation of this incident it is ESV's view that;

- The EWP Operator failed to maintain the minimum clearances from the electric line as required by the Electricity Safety (General) Regulations 2019 (regulations). Failing to maintain the minimum clearance is a breach of the regulations.
- The Safety Observer failed in their obligations as required by the ESV Electrical Safety Rules for Vegetation Management Work near Overhead Powerlines by Non-Electrical Workers.

ESV may choose to prosecute or take other enforcement action where it considers a breach of the Electricity Safety Act 1998 or Electricity Safety Regulations has occurred.

Who we are

We are Victoria's independent safety regulator for electricity, gas and pipelines.

Our role is to ensure that Victorian gas and electricity industries are safe and meet community expectations. We are also responsible for licensing and registering electricians, and educating the community about energy safety.

More information is available on the Energy Safe Victoria website: www.esv.vic.gov.au